**Practical No.7**

**Inventory problems**

#1

D=1000

C1=0.20

C3=350

#EOQ

Q=sqrt((2\*D\*C3)/C1)

Q

#Re-order time

t=Q/D

t

#frequency of replenishment

n=D/Q

n

#minimum average cost

C=sqrt(2\*D\*C1\*C3)

C

#4

D=4160

C1=15

C2=100

C3=280

#EOQ

Q=sqrt((2\*D\*C3)/C1)\*sqrt((C1+C2)/C2)

Q

# number of orders per year

n=D/Q

n

#Re-order time

t=Q/D

t

#minimum average cost

C=sqrt(2\*D\*C1\*C3)\*sqrt(C2/(C1+C2))

C

#maximum inventory level

Q1=(C2\*Q)/(C1+C2)

Q1

#maximum shortage level

Q2=Q-Q1

Q2